Eugenia Tsamis Prescott, Ph.D.

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EDUCATION

Ph.D., Biochemistry, March 2011, Duke University, Durham, NC, GPA 3.94
Certificate in Teaching College Biology, completion of Preparing Future Faculty Program

B.S., Chemistry, May 2005, University of Northern Iowa (UNI), Cedar Falls, IA, GPA 3.80
Biology Minor, Summa cum Laude, University Honors Program

CAREER OVERVIEW

2013 – present Postdoctoral Fellow - Louisiana State University Health Sciences Center
2002 – present Tutor - Various Colleges and High Schools, Duke University Athletic Department
2013 – 2013 Adjunct Professor - Duke University Summer Medical and Dental Education Program
2012 – 2014 Scientific Writing Editor - American Journal Experts
2005 – 2011 Graduate Researcher - Duke University Biochemistry Department
2002 – 2011 Teaching Assistant - Duke University, University of Northern Iowa
2002 – 2004 Undergraduate Researcher - University of Arkansas, University of Northern Iowa

RESEARCH EXPERIENCE

Postdoctoral research

Louisiana State University Health Sciences Center (LSUHSC), New Orleans, LA, advised by Imran Mungrue, Ph.D., (Fall 2013 - present)

- Successfully transitioned to a new scientific field, studying the contributions of cholesterol to ER stress and the development of atherosclerosis in cell culture and mouse models.
- Developed, implemented, and performed a new ChIP protocol for the lab, resulting in significant contributions to a manuscript studying the human CHAC1 promoter.
- Independently training, supervising, and mentoring an undergraduate research student.
- Active in ongoing training of the junior lab members in laboratory protocols and data analysis.
- Implemented a lab database management system for plasmid storage and recordkeeping.
- Contributed to a lab maintenance schedule for enhanced lab productivity.
- Successfully manage 3 lab members in the absence of the primary investigator.

Graduate research

Duke University, Durham, NC, advised by Laura Rusche, Ph.D. (Fall 2005 - Spring 2011)

- Structured, organized and successfully performed various scientific experiments as part of a five-year long project focused on the role of histone proteins in gene regulation in the yeast *Saccharomyces cerevisiae*.
- Prepared manuscripts supporting my dissertation and subsequent publication.
- Presented research findings in a clear and concise manner at local and national meetings and seminars, leading to presentation awards.
- Independently managed multiple consecutive research projects from conception to completion.
- Maintained organized records of experimental data and research samples.
- Experienced in creating and following laboratory protocols, using a variety of scientific instruments, computer programs, and complying with safety protocols and training as required.
- Identified and led several lean initiatives in further enhancing lab productivity (computer maintenance schedule, lab chore schedule, and recycling program).
- Managed and trained two undergraduate research students in proper lab techniques, analysis of the data, and completion of a senior thesis, and assisted with experimental design.
- Effectively communicated and worked with a diverse group of peers in a professional environment.

RESEARCH EXPERIENCE (cont.)

Undergraduate research

University of Arkansas, Fayetteville, AR, advised by Roger Koeppe, Ph.D., (Summer 2004)

- Synthesized peptides to study the anchor functions of tryptophan residues at the membrane/water interface in membrane spanning helical proteins.
- Presented the results at local poster presentations and as a senior thesis project.

University of Northern Iowa, Cedar Falls, IA, advised by Martin Chin, Ph.D., (Summer 2003)

- Synthesized a polyaromatic molecule to incorporate bowl-shaped hydrocarbon ligands (bucky bowls) to study the stability of metal complexes.
- Presented a poster highlighting the results at local and national meetings.

University of Northern Iowa, Cedar Falls, IA, advised by John Bumpus, Ph.D., (Summer 2002)

- Recorded the nitrate, nitrite, and oxygen concentrations in Silver Lake, IA to monitor how environmental sources contribute to the decreased sustainability of wildlife.
- Contributed to a team of researchers in an ongoing study of the environmental impacts on Silver Lake.
- Presented a poster highlighting the results at local and national meetings.

PROFESSIONAL WRITING EXPERIENCE

Contract Editor for American Journal Experts, LLC., Durham, NC (May 2012 – March 2014)

- Contract work to review and correct scientific manuscripts prior to submission.
- Secured monetary recognition for attention to detail and quality of work.
- Achieved excellent reliability score for timely completion of work assignments.

PUBLICATIONS

Prescott ET, Safi A, and Rusche LN. "A region of the nucleosome required for multiple types of transcriptional silencing in *Saccharomyces cerevisiae*." Genetics. 2011 Jul;188(3):535-48.

TEACHING EXPERIENCE

Adjunct Professor

Biochemistry, Duke Summer Medical and Dental Education Program, Durham, NC (Summer 2013)

SMDEP is an intensive six-week summer program that provides scholars with academic enrichment in science, math, writing, clinical experiences, career development, and study skills.

- Created and implemented a new Biochemistry course focused on connecting biochemistry concepts to physiology and medical diseases, engaging students and facilitating learning.
- Assessed student learning using quizzes, homework, participation, and project completion, resulting in demonstrated subject comprehension and successful completion of the course.
- Presented a Biochemistry course overview for the Robert Wood Johnson Foundation site evaluation visit in support of the SMDEP program grant funding renewal process.
- Managed, guided, supported, and trained a teaching assistant in instructional methods for class review sessions, study strategies, and coursework evaluation, improving the TA's skill set and confidence.

Guest lecturer

Molecular Biology of the Cell, Elon University, Elon, NC (Spring 2010)
Biochemistry, Elon University, Elon, NC (Spring 2010)
Genome Revolution Freshmen Focus Group, Duke University, Durham, NC (Fall 2009)

- Created and presented lectures, in class assignments, quizzes, and test questions, gaining experience in course instruction and evaluation of student learning.

TEACHING EXPERIENCE (cont.)

Teaching assistant

Human Genetics, Duke University Talent Identification Program (TIP), Durham, NC (June 2011)

Duke TIP provides intensive summer curriculum to academically gifted and talented youth to advance student learning. This two-week Human Genetics course for high school students focused on human genetic research, human gene expression, pharmacogenomics, epigenetics, SNP genotyping, gene sequencing, forensic biology, and medical genetics.

- Assisted with lesson ideas, provided instruction, led classroom activities and laboratory experiments, supervised field trips, and provided student evaluations.

Introduction to Biochemistry, Duke University, Durham, NC (Fall 2006)

- Led a weekly recitation session to review concepts, homework problems, and exam content.
- Managed a class of 200+ students as a 6-member TA team, completing timely grading of homework and tests and management of online Blackboard course site.

Applied Organic & Biochemistry, University of Northern Iowa, Cedar Falls, IA (Spring 2005, 2004)
General Chemistry II, University of Northern Iowa, Cedar Falls, IA (Spring 2003, 2002)
General Chemistry I, University of Northern Iowa, Cedar Falls, IA (Fall 2004, 2003)

- Assisted with laboratory experiments, student questions, and lab notebook grading.

Tutoring

- Developed tutoring programs for college and high school individuals and groups at various learning levels, specializing in biology, chemistry, MCAT/AP prep, technical writing and study skills.
- Created and led a weekly biochemistry group providing extra instruction and test prep to student athletes, assisting in the successful completion of the course and admission to medical school.
- Experienced in working with diverse student groups from various socioeconomic and ethnic backgrounds, ranging in age and learning abilities, improving my interpersonal skills.
- Utilized multiple VARK modalities (Visual, Auditory, Reading/writing, Kinesthetic) to communicate my points, strengthening my communication skills, teaching ability, and improving student learning.
- Experienced in tutoring the following courses over the past 12 years:
  Organic II, Xavier University, New Orleans, LA (Spring 2014)
  Cellular Biochemistry, Tulane Medical School, New Orleans, LA (Fall 2013)
  Chemistry II, University of North Carolina, Chapel Hill, NC (Spring 2013)
  SAT/ACT Science Prep, Ravenscroft, Raleigh, NC (Spring 2013)
  AP Biology, Ravenscroft, Raleigh, NC (Spring 2013)
  AP, Honors, and General Chemistry, Various High Schools, Raleigh, NC (Spring 2013)
  MCAT Prep, Raleigh, NC and Virginia Beach, VA (Spring 2013, Summer 2012, Fall 2012)
  Microbiology, Tidewater Community College, Virginia Beach, VA (Fall 2102, Spring 2012)
  AP Chemistry, Frank W. Cox High School, Virginia Beach, VA (Fall 2012)
  Foundations of Chemistry, Old Dominion University, Norfolk, VA (Fall 2012)
  Medical Organic Chemistry I, University of New England Online Course (Fall 2012)
  Biology 201, Tidewater Community College, Virginia Beach, VA (Summer 2012)
  Anatomy and Physiology I, Tidewater Community College, Virginia Beach, VA (Spring 2012)
  Health Science Chemistry I, Tidewater Community College, Virginia Beach, VA (Spring 2012)
  Introduction to Chemistry, Duke University, Durham, NC (Summer 2011)
  Introduction to Biochemistry, Duke University, Durham, NC (Fall 2009)
  Introduction to Biochemistry, Duke University, Durham, NC (Summer 2009, Fall 2008 - 2006)
  Molecular Biology of the Cell, Duke University, Durham, NC (Spring 2009)
  Writing 20 (Freshmen Writing), Duke University, Durham, NC (Fall 2008, Spring 2007, Fall 2007)
  Organic Chemistry II, University of Northern Iowa, Cedar Falls, IA (Spring 2003)
  General Chemistry II, University of Northern Iowa, Cedar Falls, IA (Spring 2002)

PRESENTATIONS AT LOCAL AND NATIONAL MEETINGS

Oral Presentations

Duke University Biochemistry Retreat, Wrightsville Beach, NC, October 2010.
Genome Biology Meeting, Duke University, Durham, NC, September 2010.
Smaller Eukaryotes Meeting, Research Triangle Park, NC, October 2008.
Duke University Biochemistry Retreat, Wrightsville Beach, NC, October 2008.
Genome Biology Meeting, Duke University, Durham, NC. October 2007.
Genome Biology Meeting, Duke University, Durham, NC, May 2007.

Poster Presentations

17th International Chromosome Conference, June 2009, Boone, NC.
IGSP Retreat, November 2008, Southern Pines, NC.
Atlantic Coast Chromatin Conference, September 2008, Chapel Hill, NC.
IGSP Retreat, October 2007, Greensboro, NC.
Atlantic Coast Chromatin Conference, October 2007, Chapel Hill, NC.
Duke University Biochemistry Retreat, October 2007, Wrightsville Beach, NC.
Symposium in Molecular Biology, June 2007, University Park, PA.
Duke University Biochemistry Retreat, October 2006, Wrightsville Beach, NC.
Atlantic Coast Chromatin Conference, September 2006, Chapel Hill, NC.
Biophysical Society Meeting, February 2005, San Diego, CA. (second author presenter)
American Chemical Society Meeting, March 2004, Anaheim, CA.
American Chemical Society Meeting, March 2003, New Orleans, LA.

TECHNICAL SKILLS

Cell culture (HEK293, RAW267.4, HepG2, U937, HeLa) growth, maintenance, and transfection
S. cerevisiae growth, maintenance, transformation, mating, sporulation, and tetrad dissection
E. coli growth, maintenance, transformation, protein overexpression
Protein purification, peptide binding assays, Western blot
DNA extraction, RNA isolation, quantitative real time PCR
Chromatin Immunoprecipitation (ChIP), co-immunoprecipitation (CoIP)
Limited mouse handling and radioactivity work

ADMINISTRATIVE SKILLS

Advanced user of MS Office Products (Word, Excel, PP), Adobe Products (Illustrator, Photoshop)
Detailed oriented - strategist and planner
Focused on work objectives - not easily distracted
Works well under pressure and in a team environment
Accepts responsibility and criticism - willing to assume leadership position
Strives for work efficiencies by constantly challenging self and/or team
Keen in managing project resources, execution risk and schedule/cost impact against completion
Communicates well with management and peers

PROFESSIONAL ORGANIZATIONS

American Heart Association (AHA) Postdoctoral Member 2014
Association for Women in Science (AWIS) Southeast Louisiana Chapter Member 2014
American Society for Cell Biology (ASCB) Postdoctoral Member 2014
Atlantic Coast Chromatin Conference (ACCC) Graduate Student Member 2007-2011
Biophysical Society Student Member 2005
American Chemical Society (ACS) Student Member 2003-2004
Phi Eta Sigma National Honor Society, Inducted 2002
National Society of Collegiate Scholars, Inducted 2002

HONORS AND AWARDS

Federation of American Societies for Experimental Biology (FASEB)/Maximizing Access to Research Careers (MARC) Grantsmanship Training Program Travel Award (2014)
Provided for travel costs to attend the 2014 Postdoctoral Preparation Institute: Career Transitions
Research Poster Presentation Award, Duke University Biochemistry Retreat (2009, 2006)
Provided monetary recognition for a clearly presented research poster
Phi Eta Sigma Scholarship, University of Northern Iowa (2004)
Provided $1500 towards undergraduate educational expenses
James W. Kercheval Scholarship, University of Northern Iowa Chemistry Department (2001)
Provided full tuition and fees for four years of undergraduate education to highly qualified entering freshmen with a serious interest in pursuing a major and career in Chemistry or Biochemistry

LEADERSHIP AND COMMUNITY OUTREACH

Girl Scouts Louisiana East (GSLExtravaganza) STEM Day (June 2014)
Dillard University, New Orleans, LA
Greater New Orleans Science and Engineering Fair (GNOSEF) Junior Chemistry Judge (Feb 2014)
University of New Orleans, New Orleans, LA
Association for Women in Science (AWIS) Southeast Louisiana Chapter (November 2013 – present)
Louisiana State University Health Sciences Center (LSUHSC), New Orleans, LA
Volunteer in the Micro World Investigate Lab (February 2013 – June 2013)
North Carolina Museum of Natural Sciences, Raleigh, NC
Homeowners Association Member (July 2011 - August 2012)
Bluegrass Park at Lexington Homeowners Association, Virginia Beach, VA
Guest panelist for undergraduates pursuing graduate school (Fall 2010, Spring 2009)
Institute for Genome Sciences and Policy (IGSP), Duke University, Durham, NC
Undergraduate Mentor for Athletes and Undergraduate Research (Spring 2009 – Fall 2008)
Duke University Athletic Department and Institute for Genome Sciences and Policy, Durham, NC
Homeowners Association President (January 2006 - December 2008)
Breckenridge of Durham Homeowners Association, Durham, NC
American Chemical Society (ACS) Student Club Vice President (Fall 2004 - Spring 2005)
ACS Student Club, University of Northern Iowa, Cedar Falls, IA
Science Demonstrations for National Chemistry Week (Fall 2002, 2003, 2004, 2005)
ACS Student Club, University of Northern Iowa, Cedar Falls, IA
Workshop for Boy Scout Merit Badge in Chemistry (Spring 2004)
ACS Student Club, University of Northern Iowa, Cedar Falls, IA